

Notice of Allowability

Application No.

10/756,793

Examiner

Celia Chang

Applicant(s)

BABICH ET AL.

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/24/07 amendment and examiner's amendment attached.
2. ☒ The allowed claim(s) is/are 165-174.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date attached.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Celia Chang
Primary Examiner
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DETAILED ACTION

1. Amendment and response filed by applicants dated May 24, 2007 have been entered and considered carefully.

Claims 1-162, 164 have been cancelled. Claims 163 and 165-173 are pending.

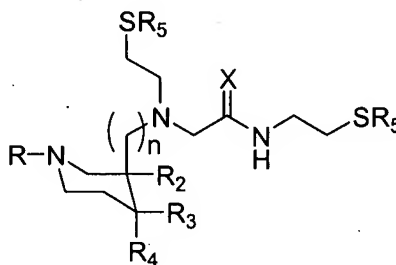
2. *Examiner's amendment*

Authorization for this examiner's amendment was given in a telephone interview with Lorna L. Tanner on July 24, 2007.

Claim 163 is canceled. Claim 174 is newly added.

Following are the pending claims:

165. (previously presented) A complex comprising technetium-99m and a compound represented by A:



A

wherein

X represents O or (H)₂;

R represents H, alkyl, alkoxyl, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl;

R₂ represents H;

R₃ represents optionally substituted aryl or heteroaryl;

R₄ represents H;

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3.

Reason for Allowance

The following is an examiner's statement of reasons for allowance:

Applicants have limited the claims to Technetium and Rhenium complexes and their use in imaging dopamine transporters in brain tissue. The complexes are neither anticipated nor rendered obvious by the art of record. Similar complexes have been known to penetrate the blood brain barrier and be retained in the brain tissue (see Rey et al. or Meegalla et al. recited on PTO-892). Claims 165-174 are allowed.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celia Chang whose telephone number is 571-272-0679. The examiner can normally be reached on Monday through Thursday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet L. Andres, Ph. D., can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

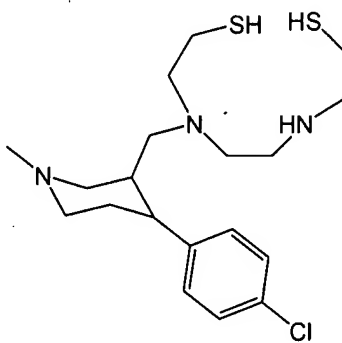
OACS/Chang
Aug. 8, 2007


Celia Chang
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R_5 represents independently for each occurrence H, alkyl, alkoxy, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxy carbonyl, or alkylaminocarbonyl ; and
 n is 0, 1, or 2.

166. (previously presented)The complex of claim 165, wherein X is $(H)_2$.
167. (previously presented)The complex of claim 165, wherein R is alkyl.
168. (previously presented)The complex of claim 165, wherein R_3 is substituted phenyl.
169. (previously presented)The complex of claim 165, wherein each R_5 is H.
170. (previously presented)The complex of claim 165, wherein n is 1.
171. (previously presented)The complex of claim 165, wherein the compound is represented by the following structure:



172. (previously presented)A complex comprising rhenium and a compound of represented by A:

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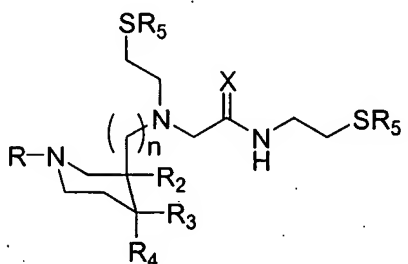
Examiner's amendment

Authorization for this examiner's amendment was given in a telephone interview with Lorna L. Tanner on July 24, 2007.

Claim 163 is canceled. Claim 174 is newly added.

Following are the pending claims:

165. (previously presented) A complex comprising technetium-99m and a compound represented by A:



A

wherein

X represents O or (H)₂;

R represents H, alkyl, alkoxyl, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl;

R₂ represents H;

R₃ represents optionally substituted aryl or heteroaryl;

R₄ represents H;

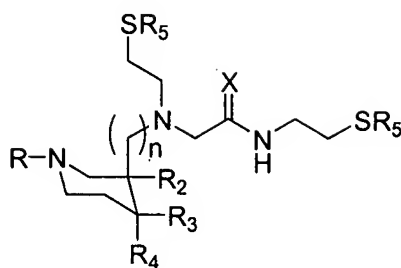
R₅ represents independently for each occurrence H, alkyl, alkoxyl, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl; and

n is 0, 1, or 2.

166. (previously presented) The complex of claim 165, wherein X is (H)₂.

167. (previously presented) The complex of claim 165, wherein R is alkyl.

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**A**

wherein

X represents O or (H)₂;

R represents H, alkyl, alkoxyl, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl;

R₂ represents H;R₃ represents optionally substituted aryl or heteroaryl;R₄ represents H;R₅ represents independently for each occurrence H, alkyl, alkoxyl, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl ; and

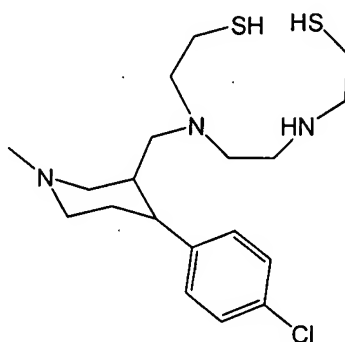
n is 0, 1, or 2.

173. (previously presented) The complex of claim 172, wherein the compound is represented by the following structure:

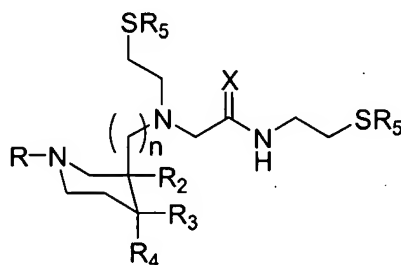
174. (new) A method of imaging dopamine transporters in brain tissue of a mammal, comprising the step of administering to a mammal a sufficient amount of a complex of claim 165 or 172 and scanning the brain tissue to detect the binding of the complex to the dopamine transporter in the mammal.

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168. (previously presented) The complex of claim 165, wherein R_3 is substituted phenyl.
169. (previously presented) The complex of claim 165, wherein each R_5 is H.
170. (previously presented) The complex of claim 165, wherein n is 1.
171. (previously presented) The complex of claim 165, wherein the compound is represented by the following structure:



172. (previously presented) A complex comprising rhenium and a compound of represented by A:

**A**

wherein

 X represents O or $(H)_2$;

R represents H, alkyl, alkoxyl, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl;

 R_2 represents H; R_3 represents optionally substituted aryl or heteroaryl;

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R_4 represents H;

R_5 represents independently for each occurrence H, alkyl, alkoxy, alkylamino, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, alkoxycarbonyl, or alkylaminocarbonyl ; and

n is 0, 1, or 2.

173. (previously presented) The complex of claim 172, wherein the compound is represented by the following structure:

174. (new) . A method of imaging dopamine transporters in brain tissue of a mammal, comprising the step of administering to a mammal a sufficient amount of a complex of claim 165 or 172 and scanning the brain tissue to detect the binding of the complex to the dopamine transporter in the mammal.